English Language Arts Curriculum

The English Language Arts program at Oak Middle School is one part of a K-12 curriculum plan that is designed to teach learners how to reason and use language purposefully as they comprehend, construct and convey meaning. The goals of the program are in alignment with those identified by Massachusetts English Language Arts Curriculum Frameworks. The goals are:

- to demonstrate understanding of the dynamic nature and structure of the English language
- to acquire strategies to decode, comprehend and analyze a variety of written, spoken and visual materials.
- to learn to reflect and respond thoughtfully to various forms of spoken and written language
- to learn to write and speak with clarity, focus, coherence, and personal engagement
- to use print and electronic media effectively

At the middle level, the program is both challenging and enriching. Strong emphasis is placed on developing thinking and language skills; emphasizing writing as an essential way to develop, clarify and communicate ideas in various formats; teaching strategies necessary for acquiring academic knowledge and achieving common academic standards and attaining independence in learning. It is a balanced program, and instruction includes a variety of methods, texts, strategies and materials to encourage learners to excel and reach their highest potential.

The curriculum provides for explicit instruction in reading/writing strategies; speaking, listening and presenting; grammar, usage and mechanics; vocabulary study; and research and technology. It draws on literature from many genres, time periods and cultures. As a core discipline, it is tied to and integrated into all other disciplines in a variety of ways. Specific interdisciplinary units of study are incorporated into each grade level.

Student progress is measured by a wide variety of assessment techniques. These may include review of assigned class work and homework, projects, quizzes, examinations, essays, oral presentations and research reports. It is expected that written answers and essays demonstrate understanding of key ideas, contain appropriate support of ideas and opinions and insightful choice of vocabulary. It is further expected that written responses be well organized and contain correct spelling, grammar and punctuation.

Oak Middle School students participate in variety of experiences that are designed to enrich and enhance learning. All students write often using a wide variety of genres including informational essays, persuasive essays, short essay response and many more. All participate in a Summer Reading Program that is specifically designed for their particular interest and grade level. Upon returning to school each year, students report on assigned selections and choice selections.

Grade 7

In the Language Strand of the curriculum students will:

- study vocabulary and word structure and origins using Wordly Wise.
- apply identified grammar competencies in speaking and editing.
- spell grade 1-7 high frequency words correctly in all writing.

In the Literature Strand of the curriculum students will:

- read, analyze and discuss historical fiction, realistic fiction, and short stories.
- read a variety of fiction and non-fiction related to themes and social studies units.
- read selections related to author studies.

- learn to identify and discuss strategies that authors use such as organizational patterns, words, tones and images, leads and conclusions, point of view, figurative language, setting and characterization.
- identify and use organizing structure in non-fiction reading and writing - compare/contrast, cause/effect and sequence. Work on distinguishing between fact and fiction and detecting bias.

In the Composition Strand of the curriculum students will:
- learn to identify and discuss strategies that authors use such as organizational patterns, words, tones and images, leads and conclusions, point of view, figurative language, setting and characterization.
- summarize and restate key ideas.
- Write essays that analyze/describe characters, are informational, or compare and contrast people, places, events and ideas.
- learn to use transitions and connections between ideas and chunks of information.

In the Media Strand of the curriculum students will:
- practice gathering, sorting and presenting information in a variety of formats including charts, graphs and tables.
- successfully prepare and deliver oral presentations with attention to audience and purpose.

Grade 8

In the Language Strand of the curriculum students will:
- study and discuss word structure, meaning, usage and origins using Wordly Wise.
- apply identified grammar competencies in speaking, writing and editing.
- identify the eight parts of speech, their functions and usage in sentences.
- Identify and use phrases in sentences; eliminate sentence fragments and run-ons; correctly capitalize and punctuate. Spell grade 1-7 high frequency words correctly in all writing.

In the Literature Strand of the curriculum students will:
- read, analyze and discuss drama, science fiction, short stories, poetry and young adult literature selections.
- read a variety of fiction and non-fiction related to themes or interdisciplinary studies.
- identify and discuss strategies that authors use such as organizational patterns, words, tones and images, leads and conclusions, point of view, figurative language, setting and characterization.
- identify and use organizing structure in more detailed and complex non-fiction readings.
- summarize, interpret, analyze and evaluate key ideas from text.

In the Composition Strand of the curriculum students will:
- identify and discuss strategies that authors use such as organizational patterns, words, tones and images, leads and conclusions, point of view, figurative language, setting and characterization.
- write clear, well-organized paragraphs, expository and descriptive with topic sentence, supporting details, correct transitions and logical concluding sentence.
- write reviews, persuasive essays/letters, open response answers and cause/effect essays
- pose effective questions and read and research information from a variety of sources.
- apply identified grammar competencies in speaking, writing and editing.
- identify and use phrases in sentences; eliminate sentence fragments and run-ons; correctly capitalize and punctuate.
- organize a longer research paper with a bibliography and report information using a variety of genres.

In the Media Strand of the curriculum students will:
- plan and participate in a dramatic presentation.
- pose effective questions and read and research information from a variety of sources.

Mathematics Curriculum

The mathematics curriculum at Oak Middle School has been aligned with the Massachusetts Curriculum Frameworks and the Standards of the National Council of Teachers of Mathematics (NCTM). The Learning Standards: Number and Operations; Patterns, Functions, and Algebra; Geometry; Measurement; and, Data Analysis, Statistics, and Probability, are evident throughout the curriculum. Through the use of open response questions the students are building on their ability to explain their mathematical thinking process in preparation for the Massachusetts Comprehensive Assessment Systems (MCAS) testing.

Problem solving, communication, connections and reasoning are an integral part of each topic of instruction. The students actively participate in a variety of learning formats: large group instruction, collaborative small groups, and individual investigations. To assist in their learning, students use measurement tools, manipulatives, calculators, and computers. Formal and informal assessment practices include open response questions, tests, quizzes, projects, and individual assignments. Estimation is used throughout the curriculum to check the reasonableness of answers. Through the use of the John Collins Writing Program, students are taught to read, write, and speak in mathematical terms. Open response questions are integrated into the different areas of study in each grade. Skills are not taught in isolation but are stressed in all mathematical topics at all levels. Technology is incorporated into lessons in all three grades.

Enrichment opportunities include the New England Math League competition for grades six through eight, Mathematical Olympiad, and MATHCounts. MATHCounts is a nationwide math competition program for grades six, seven and eight.

The seventh grade mathematics curriculum is a reinforcement of the mathematical concepts taught during the previous years. It is a year during which the students continue to develop and apply these integrated concepts as a prerequisite for future coursework. Ratio and proportion are used for solving problems. Students learn to work with rational numbers.

In grade eight, the students are placed into one of three levels based on grades, the Algebra placement test score, the grade 7 pre-assessment, the New England Math League Test (February); MCAS mathematics test results (grades 4 and 6) and teacher recommendations.

In Pre-algebra, the students review and improve their competence in the mathematical skills necessary to proceed to higher mathematics with an emphasis on the algebraic principles taught in sixth and seventh grade.

In Algebra and in Honors Algebra, students are prepared for further mathematical studies. This important first-year course has a wide scope. Problem solving, graphing, and applications are emphasized throughout the course to help students apply math to real life problems and to understand their world. Students are actively involved in investigating meaningful problems; working in groups and sharing ideas and insights; examining models; and, using calculators and/or computers in problem solving. A scientific calculator is an essential tool for success in this course.

Grade 7

In Number and Operations students will:

- estimate and compute with fractions (including the simplification of fractions), decimals, percents and integers.

- represent numbers in scientific notation and use them in problem situations.
- apply the number properties, including identity and inverse, and the order of operations, including exponents.
- identify and use the properties of operations on integers and rational numbers (including the associative, commutative, and distributive properties), the existence of the identity and inverse elements, and the property that (-1) x (-1) = 1.
- apply number theory concepts, including prime factorization and relatively prime numbers, to the solution of problems.
- solve proportions, simplify ratios, calculate unit rates, and produce scale drawings.

In Patterns, Functions, and Algebra students will:
- use concrete models to build their understanding of algebraic manipulations and make the connection with symbolic notation.
- describe, complete, extend, analyze, generalize, and create a wide variety of patterns.
- use tables and graphs to compare linear patterns.
- demonstrate the ability to solve linear equations .
- explain and generalize how a change in one variable results in a change in another variable in functional relationships, e.g., A=lw.

In Geometry students will:
- recognize and compare simple and complex geometric shapes.
- classify figures in terms of congruence and similarity, and apply these relationships to the solution of problems.
- demonstrate the ability to use mathematical and technological tools (metric and English ruler, calculator, compass, protractor).
- explain the meaning of the Pythagorean theorem, and apply the theorem to the solution of problems.
- describe angles formed by intersecting lines and the relationships among them.

In Measurement students will:
- generalize the relationships between the number of sides and the sums of the angle measures of polygons.
- apply formulas and procedures for determining measures, including areas of polygons, volumes and surface areas of prisms, cylinders, and spheres.
- select and use an appropriate unit of measurement or scale.

In Data Analysis, Statistics, and Probability students will:
- choose and apply appropriate measures of central tendency (mean, median, and mode) to represent a set of data.
- identify outliers.
- construct and interpret circle graphs.
- use tree diagrams, tables, and lists to describe sample spaces and to calculate probabilities of simple events, e.g., coin toss, dice roll.
- apply the counting principle to the solution of problems.
- make inferences about a characteristic of a population from a well constructed sample, e.g., capture-recapture.

Grade 8

Pre-Algebra Curriculum

In Number and Operation students will:
- solve problems involving percent including discount and taxes.
- apply number theory concepts, including prime numbers, factors and multiples.

- multiply and divide negative fractions and decimals.
- approximate square roots of whole numbers.

In Patterns, Functions, and Algebra students will:
- explore patterns and determine formula to find the n^{th} term.
- understand and apply the concepts of variable, expression, and equation.
- use formulas.
- graph in the coordinate plane.
- know and apply algebraic procedures for solving equations and inequalities.
- graph linear equations.
- graph inequalities on a number line.
- recognize patterns and write a rule to describe the pattern.
- be able to solve simple multi-step equations.

In Geometry students will:
- produce simple geometric transformations.
- be able to use area, surface area, perimeter and volume to answer real life problems.
- be able to use the Pythagorean theorem to solve problems.

In Measurement students will:
- use proportions to solve measurement problems.
- generalize the relationships between the number of sides and the sums of the angle measures of polygons.

In Data Analysis, Statistics, and Probability students will:
- read, interpret, and construct tables, charts, and graphs in various forms including bar, circle, line, scatterplot, stem and leaf, and box and whisker.
- continue to work with statistics (mode, mean, median and range) to solve problems and to analyze real world situations.
- be able to use simple probability to analyze real life problems.

Algebra 1

Students must know and be able to do all of the concepts and skills listed in the previous sections, plus the following:

In Number and Operations students will:
- use estimation to judge the reasonableness of results of computations and of solutions to problems involving real numbers.
- simplify algebraic expressions by applying operations with powers, including exponents that are whole numbers or negative integers.
- apply operations with powers and roots, including negative exponents, to the solution of problems.
- identify the properties of operations on real numbers, including the associative, commutative, distributive, and closure properties, and the existence of the identity and inverse elements; density of rational numbers.
- demonstrate an understanding of absolute value and apply operations to the simplification of expressions involving absolute value and to the solution of problems.
- add, subtract, and multiply polynomials.
- demonstrate facility in transforming polynomial expressions by rearranging and collecting terms, factoring, and applying the properties of exponents to the solutions of problems.

In Patterns, Functions, and Algebra students will:
- identify relations and functions from graphs, point sets, and equations.

- identify the domain and range for relations and dependent and independent variables.
- determine if a point lies on a line.
- determine the slope and both x- and y-intercepts from a linear equation or a graph of the linear relation.
- determine the linear equation from a graph and/or by using the point-slope formula.
- determine the equation of a line either perpendicular or parallel to a given line and through a given point.
- identify problem situations that lead to linear, equations and solve by applying graphical, tabular, or symbolic methods.
- use algebraic and graphical methods to solve systems of linear equations and inequalities and describe relationships between different solution methods.
- solve problems involving direct.
- solve rate, mixture, and work problems.
- describe, complete, extend, analyze, generalize, and create a wide variety of patterns.
- be able to factor polynomials using patterns.
- find solutions to quadratic equations (with real roots) by factoring.

In Geometry students will:
- graph inequalities on a number line and in the coordinate plane.
- apply and interpret transformations on figures in the coordinate plane.

In Measurement students will:
- apply the ratio of similarity to the solution of problems.
- relate changes in the measurement of one attribute of an object to changes in other attributes, e.g., how changing the radius or height of a cylinder affects its surface area or volume.

In Data Analysis, Statistics, and Probability students will:
- represent data in a scatterplot; use the scatterplot to make predictions.
- find the line of best fit from a set of data.
- select an appropriate graphical representation (e.g., scatterplot, box-and-whisker, table, stem-and-leaf, circle, graph, line graph, and line plot) for a set of data and use appropriate statistics (e.g., mean, median, mode, range, quartile, or percentile distribution) to communicate information about the data.
- apply basic counting principle to describe simple events, and compute probabilities of events with outcomes that are not equally likely.

Honors Algebra 1

Students must know and be able to do all of the concepts and skills listed in the previous sections, plus the following:

In Number and Operations students will:
- use systems of equations or inequalities to represent mathematical relationships and to solve problems.
- use pascal's triangle to solve a variety of problems
- investigate complex fractions.
- divide polynomials by monomials and simplify rational polynomial expressions by factoring and canceling the common factors.

In Patterns, Functions, and Algebra students will:
- find linear equations that represent lines either perpendicular or parallel to a given line or through a given point.
- find solutions to quadratic equations by using the quadratic formula

- solve equations and inequalities involving absolute value.
- use algebraic and graphical methods to solve systems of linear equations.
- describe the graphical significance of parameters in linear programming.

Science Curriculum

Shrewsbury's Middle School science program has as its goal the achievement of scientific literacy for all students. The program strives to provide all students with the scientific experiences that are appropriate to their cognitive stages of development, that build confidence, and serve as a foundation for more advanced ideas that prepare them for life in an increasingly complex scientific world.

The science courses have been aligned to follow the Massachusetts Science and Technology Curriculum Frameworks which require science concepts in the three major areas: earth and space science, life science and physical science. Problem solving skills are stressed so that our young scientists may be able to successfully analyze and complete difficult tasks that they encounter in life.

Every science teacher reinforces the importance of proper lab procedures. Both 7th and 8th grade stress the use of safety equipment, proper behavior in the lab setting, skills needed to use scientific equipment and the use of the scientific method. Each grade level has adopted a standard lab report. As students continue to develop in their abilities and reasoning skills, the format of the report changes slightly. Our goal is to provide students with the knowledge and experience that enable them to be prepared for high school science lab courses. Students are asked to demonstrate and enhance their skills involving scientific equipment used to make observations and collect data through accurate measurement. Some of the tools used include: microscopes, stereoscopes, triple-beam balances, graduated cylinders, probes, thermometers, and beakers.

Various forms of assessment used to evaluate the progress of students may include: reports, tests, lab reports, writing assignments, projects and other specified assignments.

Grade 7

In the Conservation and Ecology Unit, students will:
- recognize various types of ecosystems and other environments.
- discuss conservation issues.
- describe producers, consumers, decomposers, food chains and food webs.
- investigate the significance of various ecosystems.
- investigate the relationship between the living and non-living components of an ecosystem.

In the Cells and Organelles Unit students will:
- recognize cells are the basic unit of life.
- build models of animal or plant cells in addition to identifying specific organelles.
- directly and indirectly observe structure and function or plant and animal cells.
- investigate the role of DNA, genetics and heredity.
- explain how the development of the cell theory is related to the invention of the microscope.
- extract and spool DNA from onion cells.
- experiment with artificial hemoglobin to determine carriers of Sickle-Cell Anemia.

In the Processes of Life and Classification Unit, students will:

- present data to illustrate that all organism, whether single or multi-cellular, exhibit the same life processes, including growth, reproduction and the exchange of materials and energy with their environment.
- explore the six kingdoms: plant, animal, eubacteria, protists, archaebacteria, and fungi.
- observe and illustrate the variety of ways in which plants, animals, fungi and microorganisms interact.
- explore and illustrate how energy is supplied to an ecosystem primarily in the form of sunlight.
- recognize and demonstrate the chemical processes of living organisms.
- identify the impact viruses and bacteria have on our world.
- describe ways in which organisms interact with each other and non-living parts of their environments.

In the Evolution and Biodiversity Unit, students will;

- examine ways in which fossils provide information about how life and environmental conditions have changed over time.
- recognize changes that have occurred through Earth's history and have profoundly affected the evolution of life forms, and their present distribution.
- identify ways in which genetic variation allows organisms to become more diverse
- relate the extinction of a species to their inability to adapt to habitat destruction including human interaction.
- Recognize biological evolution accounts for the diversity of species developed through gradual processes over many generations.

Grade 8

In the Dynamic Changes of Earth Unit, students will:

- determine the approximate density of the Earth.
- recognize the difference between P and S seismic waves.
- graphically recognize the difference and composition of Earth's layers.
- observe and describe evidence of local climate changes over periods of years or decades.
- demonstrate the three forces that act upon the Earth's crust.
- graphically illustrate the process of determining an earthquake epicenter.
- identify the causes of volcanic eruptions.
- identify the difference between chemical and physical weathering.

In the Matter and Atomic Structure Unit students will:

- describe and identify matter in terms of specific properties; mass, weight, volume, density.
- compare mass and weight.
- explain why the mass of an object is constant, whereas weight can change.
- discuss the relationship between mass and inertia.
- manipulate scientific instruments to measure mass, weight, volume and density using appropriate metric units.
- classify the three main subatomic particles of an atom.
- explain and model the structure of the atom.
- recognize the design of the modern periodic table.
- demonstrate an understanding of how elements combine to form compounds.
- recognize that most compounds are made up of molecules.

In the Forces and Energy Units students will:

- recognize that motion is observed according to a particular frame of reference.
- define motion and speed.
- calculate speed using the formula, speed equals distance divided by time.
- distinguish between constant speed and average speed.
- graph speed and distance divided by time.

- distinguish speed from velocity.
- identify the five main forms of energy and five examples of each.
- describe the two states of energy i.e. potential and kinetic and give examples of each.
- define energy conservation and give examples of in everyday life.
- state the law of conservation of energy.

In the Mapping Earth's Physical Features Unit students will:
- design and build contour maps.
- differentiate between latitude and longitude.
- understand the use of scale; map key, compass rose, direction and various mapping representations.
- recognize and interpret earth's physical feathers as represented on maps.

History and Social Science Curriculum

In keeping with Massachusetts History and Social Science Framework, the History and Social Science curriculum at Oak Middle School includes four specific goals for students:

- to acquire knowledge, skill and judgment to continue to learn. This involves acquiring specific content knowledge; gathering, interpreting and assessing; seeing cause and effect; comparing; noting bias and prejudice; asking questions; writing and speaking clearly.
- to participate intelligently and responsibly in civic life and to respect human and civil rights for all people.
- to deliberate about local, national and international issues.
- to avail themselves of historical and cultural resources - historic sites, museums, parks, libraries and multimedia information sources.

The Oak Middle School program is one part of a K-12 curriculum plan that is designed to offer students a sequenced course of study that emphasizes learning through the study of the United States and world history, geography, economics, civics and government. Students study United States History from the earliest settlements to the eve of the Civil War in grade five, Ancient and Classical Civilizations in the Mediterranean to the Fall of the Roman Empire in grade six, World Geography in grade seven, and World History Part I, 500c.e. – 1800 c.e. in grade eight. At each grade level, the curriculum draws on and integrates several disciplines - fine arts, literature and developments in science, technology and mathematics. A unit of study may include the reading of a related novel(s), examination of primary source documents, study and performance of music or songs from a particular era or a research investigation on important people or related inventions. Current events are also an integral part of the curriculum. Students study issues related to their own lives, important historical themes or turning points under study.

Student progress is measured by a wide variety of assessment techniques. These may include review of assigned class work and homework, quizzes, examinations, oral presentations and research reports, performance assessments, and small group projects. It is expected that written answers and essays demonstrate understanding of key ideas, contain appropriate support of ideas and opinions and insightful choice of vocabulary. It is further expected that written responses be well organized and contain correct spelling, grammar and punctuation.

The program at the middle level contains a variety of extension and enrichment opportunities for students. These programs are designed to promote student awareness and celebrate student achievement. They include the National Current Events League, and the National Geographic Bee.

Grade 7

Units of Study:

I Tools of Geography
II Africa
III Middle East
IV Central and South Asia
V Southeast Asia and the Pacific
VI Europe
VII South America

Within theses units, Students will be able to:

- locate major bodies of water, regions, mountains and any other geographical features unique to the area of study on a map of the world.
- use a map key to locate countries and major cities in each region of study.
- Explain the five themes of geography as they relate to each region.
- explain how the following five factors have influenced settlement and economies of major regions/countries: absolute and relative locations, climate, major physical characteristics, major natural resources and population size.
- use map and globe skills to interpret different kinds of projections, as well as topographic, landform, political, population, and climate maps.
- use geographic terms correctly in reading and writing.
- interpret geographic information from a graph or chart and construct a graph or chart that conveys geographic information (e.g., about rainfall, temperature, or population size).
- use demographic terms correctly in reading and writing.
- give examples of products that are traded among nations, and examples of barriers to trade in these or other products.
- describe how different economic systems (traditional, command, market, mixed) try to answer the basic economic questions of what to produce, how to produce, and for whom to produce.
- compare the standard of living in various countries.
- read and respond to a variety of literary selections, primary source documents, and reference materials designed to enhance and support the history and social science curriculum.
- write clear essay answers with reasons and evidence.
- research selected topics and report using a variety of reporting techniques.
- study current events as they apply to life today and as they may relate to specific units of study.

Grade 8

Units of Study:

I The Emergence and Expansion of Islam to 1500
II The Medieval Period in Europe to 1500
III Encounters between Christianity and Islam to 1500
IV The Renaissance and Reformation in Europe
V Scientific Revolution and the Enlightenment in Europe
VI The Origins of European Western Expansion and the civilizations of Central and South America
VII African History to 1800
VIII History of China to 1800

Within these units, students will be able to:

- interpret and construct timelines that show how events and eras in various parts of the world are related to one another.
- interpret and construct charts and graphs that show quantitative information.
- distinguish between long-term and short-term cause and effect relationships.
- show connections, causal and otherwise, between particular historical events and ideas and larger social, economic, and political trends and developments.
- interpret the past within its own historical context rather than in terms of present-day norms and values.
- distinguish intended from unintended consequences.
- distinguish historical fact from opinion.
- using historical maps, locate the boundaries of the major empires of world history at the height of their powers.
- define and use correctly vocabulary and terms specific to civic, government, and economic development in world history topics.
- read and respond to a variety of literary selections, primary source documents, and reference materials designed to enhance and support the history and social science curriculum.
- write clear essay answers with reasons and evidence.
- research selected topics and report using a variety of reporting techniques.
- study current events as they apply to life today and as they may relate to specific units of study.

Health Education Curriculum

Grade 7

This course includes substance abuse prevention and violence prevention. Each unit includes note taking, discussions, handouts, journals, and assessment. The course is part of the Allied Arts strand and runs for 6 weeks.

Students will:

- To recognize conditions that support or negatively impact respiratory health
- Describe addiction to alcohol, tobacco and other substances and the methods for intervention and treatment
- List prevalent early and late adolescent risk behaviors and the potential negative consequences
- Define and describe gateway behaviors and their relationship with additional risk behaviors
- Identify the legal, financial, social, physical and psychological consequences of potentially harmful behaviors related to substance abuse.
- Recognize violent behavior and how substance abuse enhanced these tendencies.

Grade 8

This course includes a study of safety and first aid and interpersonal relationships and disease prevention. Each unit includes note taking, discussions, handouts, journals, and assessment. The course is part of the Allied Arts strand and runs for two 6 week periods.
Students will:

- Describe how to avoid unintentional injuries applying rules controlling actions and responsible attitudes
- Identify actions steps to apply when adults are and are not present during exposure to hazards and accidents
- Describe actions and behaviors to protect oneself when home alone or caring for small children
- List safety rules for recreational activities
- Identify procedures to follow involving burns, wounds, poisoning, structure injuries, and temperature extremes
- Demonstrate the use of assertive behavior, refusal skills, and actions intended for personal safety
- Distinguish among safe, unsafe and inappropriate touch.
- Name persons and community helpers to contact for assistance.
- Demonstrate attentive listening, feedback, and assertiveness skills to enhance interpersonal communications and resolve conflicts.
- Describe appropriate forms of respect, appreciation and responsibilities that friends have for one another
- Explain how peer pressure is related to choices and apply proactive strategies for managing peer pressure
- Demonstrate the Power Model for decision making
- Describe skills to prevent and control the spread of disease.
- Identify symptoms of illness and alerting caretakers.
- Recognize that there is discrimination based on a person's real or perceived differences
- Identify age appropriate ways to show affection and recognize that in adolescents can express their feelings without engaging in sexual intercourse
- Describe the types and purposes of dating with acceptable and unacceptable behaviors in dating
- Identify characteristics of teen dating violence
- Identify healthy and unhealthy relationship characteristics
- Identify coping skills to deal with relationship termination (breaking up)
- Describe skills to prevent and control the spread of disease.
- Identify symptoms of illness and alerting caretakers.

Sexuality Education

The Shrewsbury Middle School has made a commitment to present instruction in Human Growth and Reproduction and Sexuality Education. These programs have been developed by our professional staff and endorsed by the Health Education Advisory Council as well as the Shrewsbury School Committee. The overall goal is to promote the health and well being of our students and to help them make wise and informed decisions during their teenage years and beyond.

In accordance with Massachusetts law (G.L. c. 71 s32A), and School Committee policy #647, a parent or guardian may exempt a child from any portion of the curriculum that primarily involves human sexual education or human sexuality issues. To receive exemption, simply send a letter requesting an exemption for your child to the principal. No student who is exempted from this portion of the curriculum will be penalized. We will provide an alternative assignment to student who are exempted.

Topics such as puberty, dating, relationships and communication skills, reproduction and pregnancy, genetics, birth control, prevention of HIV/AIDS and other sexually transmi9tted diseases and prevention of sexual abuse are included. The specific courses that include these topics are printed below. If you would like to review the materials for these curriculum, you are welcome to do so.

During the instruction, students will be able to ask questions, which will be answered factually and in an age-appropriate manner. Each student’s privacy will be respected, and no one will be put on the spot to ask or answer questions or reveal personal information. Material will be presented in a balanced, factual

way that makes clear that people may have strong religious and moral beliefs about issues such a birth control, an abortion and that these beliefs should be respected and valued.

We look forward to working with you to ensure that your child has a positive and educationally enriching experience this school your. If you have any questions about sexuality education, please call the school at 508 841 1200 or Mrs. Patricia Degon, Director of Health, Physical Education and Family and consumer Sciences, at 508 841 8856.

Grade 7	**Health**	**Consequences of potentially harmful behaviors related to substance abuse,**
Grade 8	**Health**	**Choices and consequences, relationships and responsibilities, Disease Prevention, STD's, HIV/AIDS**

Physical Education Curriculum

The Physical Education Program for middle school students provides opportunities to work cooperatively, promotes a sense of team spirit, safety, good health, and enjoyment that is a change from traditional classroom instruction. Recognizing the unique opportunity physical education has to contribute to social, emotional, and physical development, it is intended to be a planned sequence of learning experiences designed to contribute as an integral part of the total education for the student.

The games unit and team sports are a major component in the curriculum and a significant progression from elementary physical education. Fitness and dance activities such as step aerobics, aerobic slides, weight training, and line and group dancing will all be offered to the students while at the middle school. The staff defines and models sportsmanship and fairplay and encourages each student to improve their individual abilities.

Grade 7 & 8

This curriculum includes follow up instruction to team sports with a major instructional emphasis placed on proficiency and competency of the individual and team skills for the activities being offered. Students will be encouraged to explore their personal interests that result from participation in a variety of different activities.

The grade level activities are:

Orientation and Physical Assessment
Flag Football
Introduction for Project Adventure
Soccer
Volleyball
Basketball
Snow shoeing

Olympic Games Unit
Fitness/Aerobics
Dance
Lacrosse
Track & Field
Physical Best Testing

Students will:

- Demonstrate mature forms for all basic manipulative skills and competence in more advanced specialized physical skills
- Identify and pursue leisure time activities that promote physical fitness and relieve mental and emotional tension
- Identify and apply basic principles of training and appropriate guidelines of exercise to improve immediate and long-term physical fitness
- Describe the relationship between a healthy lifestyle and a sense of well-being
- Demonstrate, understand and respect strength and speed differences, and identify strategies for inclusion for all in physical activity settings.
- Actively work together to solve problems and progress in skills within each unit.

Music & Drama Curriculum

Performing Arts offerings at Oak Middle School include grade level choral, band, and string orchestra ensembles, as well as Select Choir and Jazz Ensemble. Students can experience music by singing or playing in rehearsals, assemblies, concerts and parades. Those students possessing a high level of ability and motivation are encouraged to audition for the Central District Jr. High Music Festival. Drama will be offered as part of the 7th grade Allied Arts strand, and eighth grade students will experience music technology in our new keyboard lab.

Students participating in performance groups are expected to prepare their music individually for rehearsals and concerts. Students must take responsibility for having their instruments and other materials on hand for class. Since formal music lessons conclude at the end of sixth grade in the Shrewsbury Public Schools, students are encouraged to study privately with a specialized teacher to enhance their skills. (Private lessons are not required.) Students participating in band, chorus, or string orchestra are expected to be present at all performances, as these presentations serve as part of the overall assessment of each student's musical progress. Students regularly observe audio and video recordings of their work, as well as professional recordings, to analyze and discuss all aspects of performance.

Many of the music strands of the Curriculum Frameworks have been incorporated into the Shrewsbury music program. Aspects of creating and performing are utilized when practicing or presenting a concert. Imagination and creative thinking are employed when a student chooses his or her own form of assessment, and then strives to achieve that goal. Students involved with Jazz Band and Select Choir are learning the tools for successful improvisation. The Shrewsbury music curriculum is continually being analyzed and modified to align with state and national standards.

Grade 7

In grade seven at the Oak St. School, students can experience a variety of musical offerings. Performance opportunities are offered in the form of the following three ensembles:

Band Chorus String Orchestra

These groups rehearse three times per six-day rotation and perform annually at seasonal concerts. The opportunity exists for talented members of the 7th grade performance groups to audition for the Central District Jr. High Music Festival.

Students will:

- Focus on expanding their skills and musicality
- Rehearse and perform appropriate literature of various styles from different musical periods

Drama is offered as part of the 7th grade Allied Arts program.

Students will:

- Experience a basic foundation for theater production
- Learn acting techniques, character & scene development, script reading and improvisation
- Learn blocking, lighting, costume & set design, vocal projection, and body position

Grade 8

In grade eight at the Oak Middle School students have the opportunity to take advantage of the following musical offerings:

- Band
- Chorus
- String Orchestra

Each of these ensembles rehearses three times during a six-day rotation. Promising students of eighth grade ensembles are encouraged to audition for the Central District Jr. High Music Festival.

Students will:

- Focus on expanding their skills and musicality
- Rehearse and perform age appropriate challenging literature of varied styles
- Experience expanded instrumentation and voicing
- Explore varied solo opportunities

Electronic Music Keyboarding course will be available as part of the Allied Arts program for all students in the 8th grade.

Students will:

- Learn to experience elements of music composition
- Learn advanced musical notation and terminology
- Expand listening and sight reading skills
- Learn basic keyboard skills

Select Chorus is also available for 7th and 8th Grade students selected by audition. The group performs a challenging repertoire of music in a variety of styles. Members of this group are introduced to improvisational vocal jazz. In addition to performing in school concerts, the select chorus performs at special events throughout the community. Members of the 7th and 8th Grade Chorus, Band, and Orchestra

are encouraged to audition for this ensemble. The select choir will rehearse after school on a weekly basis.

Jazz Ensemble is offered after school one day per week. Students in this instrumental ensemble learn to perform jazz, blues, rock and pop music. Students must be members of one of the 7th or 8th grade ensembles as a prerequisite.

Instructional Technology Curriculum

The Instructional Technology Department focuses on developing skills to enable students to gather, understand and manipulate information for presentation purposes. Student use of technology to enhance their learning experiences while at Oak Middle School and beyond. These technologies are integrated into all curriculum areas fully embracing the guiding principle that technology enhances teaching and learning. To assist in accomplishing these tasks, the Shrewsbury schools fully embrace the Department of Education's technology standards for all students:

- Demonstrate proficiency in the use of computers and applications as well as an understanding of concepts under lying hardware, software, and connectivity.

- Demonstrate responsible use of technology and an under standing of ethics and safety issues in using electronic media.

- Demonstrate ability to use technology for research, problem-solving, and communication. Students locate, evaluate, collect, and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences.

The ability to progress toward a mastery level in a particular skill is directly related to the following: accessing technology, skills and technical expectations of the instructor, and our districts professional development effort. Students have opportunities to use computers, video equipment and a variety of other technologies throughout their academic programs.

Grade 7

Data Manipulation: databases and spreadsheets
Using a variety of topics students will be introduced to database and spreadsheet environments. Students will use database information; create spreadsheets and make charts for visual presentation of the data.

Over the 30-day experience students will:

- Learn how to create database and spreadsheet documents.
- Identify fields, record and other components.
- Learn how to enter and sort data.
- Use the "Find" function in a database.
- Learn the structure and function of spreadsheet (e.g. cells, rows, columns, formulas)
- Create an original spreadsheet, entering simple formulas.

- Produce charts and reports for each application.
- Learn how to access information and design database reports using keyword searches and setting criteria will answer questions
- These transferable skills will be useful to other projects and learning experiences.
- Projects will relate to core academic areas whenever possible

Grade 8:

Digital Storytelling: movie making and media literacy
This class is an introduction to the video production using iMovie. An additional media literacy strand will be woven into daily instruction as students review public service announcements and commercials. Students will be introduced to how to produce effective storytelling with video. Just like learning to compose stories with words, students will learn how to compose stories with video using images, sounds, music and narration.

Over the 30-day experience students will:

- Explore to media literacy concepts
- Understand how to edit video in an effective way to communicate the message the student intends to give.
- Learn the proper care and use of video camera.
- Learn story planning.
- Learn the editing process.
- Learn tips for better videos.
- Projects and Public Service Announcements will relate to core academic areas and school events

Media

The Oak Middle School Media Center helps students become independent, lifelong learners by encouraging thinking and problem solving through the access, evaluation and effective use of information. Literature appreciation and a love for reading are promoted by providing a wide variety of books in all genres and reading levels appropriate for middle school students. Students are invited to come to the media center, with teacher permission, at any time during the school day to select and check out books, or to do research.
All students in grades 7-8 receive an orientation to the media center in which they are given specific instructions on how to locate books and information in various print and electronic resources, particularly those located on the Oak Middle School Media Page. Parents are encouraged to become familiar with this wonderful source of safe, appropriate information, and to help their children to use it for their homework and research projects that are assigned by their teachers.

The Oak Middle School Media Page can be located at this address:
http://www.shrewsbury-ma.gov/schools/Oak/media.html

Please bookmark this site for use throughout the school year. You may contact
Mrs. Connors if you have questions or if you can't find the information you need.

Technology Education Curriculum

Technology Education is an integrated discipline that prepares the student for a future that will require the application of knowledge and the use of resources to meet basic human needs. Technology Education teaches the student to understand, manipulate, and utilize appropriate technology in their everyday life and prepares the student to be a productive member of our rapidly changing technological society.

At Oak Middle School this is accomplished through an activity-based curriculum that focuses on the mental processes associated with inventing, solving problems, designing, testing, analyzing and innovation. The following concept areas have been identified by the Massachusetts Science and Technology/Engineering Framework and are an important part of the Oak Middle curriculum.

- Materials, Tools, and Machines
- Engineering Design
- Manufacturing
- Construction
- Communication
- Transportation

Oak Middle School Technology Education incorporates ScanTek Technology Education modules into the basic curriculum. These modules are used in conjunction with a traditional, materials based approach to teaching this exciting, diverse, hands-on pre-engineering subject. Two nearly identical technology labs are equipped with both ScanTek modules and traditional tech fabrication machines and tools. The meshing of these two techniques provides students with a true *hybrid* experience that will allow them to work with both ultra-modern computer curricula yet also have the opportunity to experience material processing through traditional Tech Ed. methods. Students rotate through the following subjects at both the 7^{th} and 8^{th} grade levels.

Modular subjects studied include:

- Digital Photography
- Automotive Technology
- Electronics
- Communications
- Alternative Energy
- Robotics
- Construction Technologies
- Material Processing
- C.A.D.

Maintaining a hands-on curricula mixed with computer age technology provides students with a comprehensive range of resources and experiences that are combined to create an exciting and challenging Technology Education program and prepare students for the technological world we all live in.

Grade 7

Grade 7 is designed to provide students with an initial exploratory experience in Technology Education. Students will work in two member “design teams” and follow a course of study that will take them from

basic mechanical design through final prototype construction and analysis. Significant emphasis will be placed on safety and working in a cooperative environment.

Students will:

- study the impact of technology on their lives, society and the environment
- study the design process as it relates to Technology Education
- acquire the skills necessary to accurately and safely manipulate various tech tools and machinery
- develop and refine critical thinking skills while dealing with design and engineering problems
- study basic design and layout technology (technical drawing)
- design, construct, test and analyze various prototypes
- work cooperatively with others and apply knowledge in a practical manner
- study the evolution of technology in the United States
- rotate through various Scantek Technology Education Modules

Grade 8

8th grade students are expected to expand upon the various skills acquired in grade 7 Technology Education. Emphasis will be placed on higher-level design problems which will require students to innovate and create solutions to given technology problems. Students will develop an intuitive sense of the technological world around them and solve problems using a variety of different solutions.

Students will:

- review grade 7 technical concepts
- understand the concept of "trade-offs" in the design and engineering process
- articulate/present to peers a design solution using both written and computer derived materials
- design, construct, test and analyze various prototypes
- develop an understanding of technology as a system that includes a goal, input, process, output, and feedback, and uses resources such as people, materials, tools, energy, information, finances, and time (the Universal System Model).
- explain basic processes in manufacturing systems, e.g., cutting, shaping, assembling, joining, finishing, quality control, and safety.
- acquire, interpret and disseminate data and findings as it relates to prototype performance using multiple representations including tables, mathematical, scientific and physical models.
- rotate through various Scantek Technology Education Modules

Visual Arts Curriculum

The Visual Arts Program at the Shrewsbury Middle Schools provides students with the opportunity to work in a variety of materials both two and three-dimensional. These opportunities further develop each student's sense of design, drawing and creativity. Each grade level continues with and enriches the skills acquired in previous years and develops a knowledge base of various artists and art movements. The Middle School, Grades 5-8, curriculum is under revision and is seen as a single unit with each student optimally receiving four thirty day cycles of art, one each year. When possible, work coordinates with other middle school curriculum.

Within each of the grade levels the Visual Arts incorporate the Learning Standards of the Massachusetts Arts Curriculum Frameworks. These are:

- Media, Materials and Techniques
- Element and Principles of Design
- Observation, Abstraction, Invention and Expression
- Drafting, Revising and Exhibiting
- Critical Response

Grade 7

All students are given the opportunity to formally examine various art methods and techniques in a creative environment. Student decision-making and experimentation is emphasized in achieving technical development and creative, personal growth. Use of a sketchbook as personal journal is continued.

Students will:

- Learn new materials and techniques while developing and refining those used in the elementary level
- Become acquainted with their own artistic potential
- Use and identify the principles of design and the elements of art in their own work.
- Emphasize the use of the color wheel and color theory.
- Integrate a growing art vocabulary into everyday language
- Critique art work through peer and self-evaluation.

Grade 8

Students continue to expand upon the basic skills acquired in previous grades. Emphasis is placed on further developing craftsmanship and presentation of artwork. Student decision-making and experimentation is emphasized in achieving technical development and creative, personal growth. Use of a sketchbook as personal journal is continued.

Students will:

- Learn new materials and techniques while developing and refining those used in the previous years.
- Become further acquainted with their own artistic potential
- Apply the principles of design and the elements of art in their own work
- Integrate a growing art vocabulary into everyday language
- Critique art work through peer and self-evaluation
- Encouraged to continue the artistic experience at the high school.

Foreign Languages Curriculum

The two main purposes of learning a foreign language are communication and appreciation of cultural diversity. As our world becomes a smaller place, owing to the multiple and far-reaching communications networks which currently exist, interaction with other countries becomes more probable and immediate. Even in our own country, one does not have to venture far from home to find places in which to converse

in another language. Since language and culture are inextricably bound together, cultural understanding is developed along with the skill of listening, speaking, reading, and writing. Moreover, in the learning of another language, students begin to make better connections with English, which results in a better understanding of their own language and of their own culture.

Students begin in grade five with the study of either Spanish or French four days out of a six day cycle. The program continues in this manner through grade eight. Latin is introduced to interested students in grade seven.

In the foreign language program, concentration is on the four basic skills of speaking, listening, writing and reading. The curriculum is designed and tailored to age level and aligned to the Massachusetts Foreign Language Frameworks in advance by the classroom teachers. Teachers arrange the material into thematic units, allowing them to draw upon interdisciplinary subject matter and reinforce it in the foreign language classroom. In grade eight, foreign language study is more focused and more rigorous, as this course is the equivalent of a high school beginner course. At this level, students are introduced to standardized written and aural tests. Communicative competency is stressed as the four skills continue to be addressed.

Within the last decade, traditional approaches to teaching foreign languages have yielded to new, performance-based approaches that have a common focus on the student's ability to use the language beyond the classroom in real life situations. Emphasis is placed on what the student can do with the language, independent of how the language was learned, what methods were involved or what materials were used.

Grade 7 Spanish

Thematic units:

- Basic dialogues: personal information/description
- The classroom and school schedules
- Self- portrait: What am I like?
- The family
- Sports and leisure activities
- Foods

Grade 7 French

Thematic units:

- The classroom and school schedules
- Use of the affirmative and negative
- Likes and dislikes
- Sports/Leisure activities
- Daily activities
- Invitations/accept/decline
- *Etre* with places/clothing/personal description
- Cultural differences in schools etc.

Students will:

- Ask and answer questions/accept and decline invitations
- Ask and answer questions about self and others

- Make and respond to requests
- Exchange information
- Express likes and dislikes
- Express needs
- Obtain information and knowledge
- Express opinions and ideas; agreement or disagreement
- Describe people, places and things
- Present information in a brief report
- Interact in group cultural activities
- Demonstrate an understanding of the traditions and practices of the culture studied
- Demonstrate an understanding of the nature of language through comparisons with English

Grade 8 Spanish and Grade 8 French

These courses are the equivalent of high school level Spanish I or French I. Students at this level are introduced to standardized testing both in written and in aural forms. Students continue to learn the basics of language while developing better comprehension and self–expression skills. More vocabulary and simple language patterns are used in conversation based on class experiences and daily activities. Students will be able to express themselves in writing and orally in the positive, negative, and interrogative. They will be able to verbally interact with the teacher and with each other in the present and immediate future tenses. The course(s) introduce the students to the cultures of Puerto Rico, Dominican Republic, Costa Rica, Nicaragua, and France respectively.

By the end of grade 8, students will be at the stage one proficiency level as defined by the Massachusetts Foreign Language Frameworks.

Latin

The study of Latin begins in grade seven and continues through the high school level. The study of Latin provides students with an appreciation of its importance as the basis of all Romance languages as well as the rich and varied civilizations of the Romans and the Greeks. Additionally, the connections between Latin and English greatly strengthen students' skills in organization, problem- solving, grammar and vocabulary. Students may continue the study of Latin through Advanced Placement Latin at the high school level.

Grade 7 Latin

Units:

- Basic sentence structure
- Vocabulary
- Derivatives
- Nominative, Genitive (dative) Accusative and Ablative and Vocative Cases
- Declensions 1-3
- Adjectives, declensions 1-3
- Noun/ Adjective agreement, adjectives in declensions 1-2
- Present tense, active voice, all conjugations I-IV
- Roman and Greek mythology
- Ides of March
- Complimentary infinitives
- Prepositional phrases

- Gender/verb conjugation
- Parts of body
- Paterfamilias
- Slavery
- Trojan War
- Irregular Verbs: *sum, eo , volo, nolo*
- The Seven Kings of Rome

Grade 8 Latin

This course is the equivalent of a high school level Latin I. Students continue to learn the basics of Latin grammar while honing their comprehension, pronunciation and translation skills.
By the end of grade 8 students will function at stage one proficiency level as defined by the Massachusetts Foreign Language Frameworks.

Students will:

- Increase their proficiency with declensions 1-3, all six cases of nouns, declensions of adjectives 1-3, and noun/adjective agreement.
- Increase proficiency with verbs of all conjugations, I-IV in the present, imperfect, future, and perfect tenses, active voice.
- Increase proficiency with English grammar and vocabulary by understanding Latin roots, prefixes, suffixes and derivatives.
- Acquire knowledge of important classical myths as well as Roman culture and history.
- Read and translate culturally relevant pedagogically prepared passages